

STATE OF HAWAII
DEPARTMENT OF ACCOUNTING
AND GENERAL SERVICES
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June 6, 2006

FILED ELECTRONICALLY

Ms. Marlene H. Dortch, Secretary
Federal Communications Commission
Office of the Secretary
445 12th Street, SW
Washington, DC 20554

Dear Ms. Dortch:

Subject: Comments on the Eighth NPRM for WT Docket 96-86, "In the Matter of the Development of Operational, Technical and Spectrum Requirements for Meeting Federal, State and Local Public Safety Communications Requirements Through the Year 2010"

The State of Hawaii Department of Accounting and General Services (DAGS), in response to the Commission's 8th Notice of Proposed Rule Making for WT Docket 96-86, files these comments regarding modifications to the rules to accommodate broadband communications in the 700 MHz public safety band:

1. The DAGS urges the Commission to consider proposals to encourage and ease the deployment of broadband communications, including those that suggest reconfiguring the band plan both within the 700 MHz public safety band and within adjacent spectrum, *including altering the narrowband portions of the 700 MHz band*, provided that:
 - There are no changes to the technical parameters other than frequency changes regarding the use of or protections provided to the (6.25 kHz channelized) narrowband spectrum in the 700 MHz band; and
 - If the 700 MHz band is reconfigured the amount narrowband spectrum (number of 6.25 kHz channels) allocated for General Use and State use remains the same; and
 - If the 700 MHz band is reconfigured no changes are made to the frequency assignments for the General Use and State use channels in the 773-776 MHz/803-806 MHz portions of the band (General Use and State use channels within the channel number ranges 481-960 and 1441-1920); and
 - If the Public Safety band is reconfigured the reconfiguration rules are placed into effect as rapidly as possible.

State of Hawaii agencies are now beginning to deploy systems in the narrowband spectrum portion of 700 MHz public safety band as authorized by FCC license WPTZ784. The DAGS believes that the overall benefit from band reconfiguration outweighs the incremental cost to the State of Hawaii of retuning newly implemented systems *at this time*. However if there is a long delay in band reconfiguration the DAGS would reconsider its support of band reconfiguration. The State of Hawaii expects that it will make use of all of the narrowband channels authorized by the Commission for State use in the 700 MHz public safety band.

2. The DAGS does not agree with the Commission's assertion in the Seventh NPRM that the rules governing interoperability channels should be similar for wideband and narrowband operation and appreciates the opportunity provided by the Commission to revisit this matter. However, the DAGS urges the Commission to maintain wideband interoperability channels within the wideband/broadband segment of the 700 MHz public safety band, provided that:

- The amount of spectrum allocated to wideband interoperability channels is kept to a minimum amount such as no more than 300 kHz (i.e. six 50 kHz channels); and
- Both aggregation or subdivision of the wideband interoperability channels are prohibited (i.e. this spectrum is used only in support of 50 kHz channels); and
- The wideband interoperability channels are located at the edge or edges of the wideband/broadband segment of the 700 MHz public safety band to avoid sub-band fragmentation; and
- Two of the six wideband interoperability channels are held in reserve for use as nationally coordinated interoperability channels; and
- Two of the six wideband interoperability channels are allocated for State use with the same terms and conditions applied to the State use narrowband channels; and
- Two of the six wideband interoperability channels are allocated for regional assignment through the Regional Planning Committee (RPC) process; and
- Radios operating on non-interoperability channels in the wideband/broadband spectrum not be required to support interoperability channels of any type or to have any type of mandated "must carry" interoperability capability; and
- The Commission withdraw the existing requirement for use of Scalable Adaptive Modulation on the wideband interoperability channels and mandate some other standard either now or in the future for the wideband interoperability channels that is not encumbered with issues relating to intellectual property rights.

The need, nature, and use of narrowband interoperability channels for mission critical voice applications are well understood and accepted. The same situation does not exist for either wideband or broadband interoperability. The DAGS recommends that the Commission refrain from any “must carry” requirement until wideband and/or broadband data interoperability is better defined, widely accepted in concept, and deemed to be a requirement by the broad community of first responders. However, the DAGS believes that the retention of a minimal amount of spectrum to provide for wideband interoperability channels is prudent. The DAGS believes that no fewer than three wideband interoperability channels (150 kHz total, one 50 kHz wide channel each for nationwide, State, and regional use) and no more than six wideband interoperability channels (as described above) should be required.

Mandating a physical layer standard for 50 KHz data channels, such as Scalable Adaptive Modulation, is the least effective method to promote data interoperability because of the paucity of applications and the limitations placed on developing and using other standards. Interconnecting first responders at the network layer is probably the best approach at this time. The DAGS suggests that the Commission refrain from adopting a physical layer standard for wideband interoperability channels until the first responder community reaches a consensus on the on-scene or unit-to-unit data transfer applications that would benefit from a physical layer standard.

3. The DAGS urges the Commission to adopt a flexible band plan for the non-narrowband portions of the 700 MHz band that permits the RPCs to accommodate wideband and/or broadband use as they see fit provided that:

- The band plan maximizes the ability of first responders to adopt future technologies; and
- The band plan maximizes spectrum efficiency by minimizing the requirement for and size of “guard bands” consistent with the requirement to protect other public safety allocations (e.g. narrowband channels) and technologies utilizing adjoining portions of the wideband/broadband block; and
- Guard bands internal to the 700 MHz band remain under the control of the RPCs; and
- Aggregation of 50 kHz channels (other than those reserved for interoperability) be permitted without restriction to any level consistent with meeting interference, protection, and guard band requirements.


The DAGS urges the Commission to refrain from adopting band plans that require the use of a single, limiting technology such as those proposed by Lucent, NPSTC and Motorola as described in the Notice of Proposed Rule Making under discussion. It is important that the band plan adopted provide RPCs with the ability and authority to provide either or both wideband and broadband channels to first responders. The RPC process established by the Commission is the best mechanism available for administering broadband and wideband spectrum use by first responders within their own regions. RPCs should be granted the flexibility necessary to meet the requirements in their regions.

Coordination at the local level through the RPC formed consensus is the best way to sort through the competing demands for the limited wideband and broadband spectrum which will be available. Oversight by the RPCs will ensure an open and public discussion on how these limited resources will be allocated, used, and coordinated with adjacent regions. There is no single national entity that represents the diverse needs of all first responders. The RPCs should continue to operate independently and be kept free from undue pressure from federal agencies and the vendor community. The DAGS supports the efforts of the National Association of Regional Planning Committees that encourages RPCs to independently express and promote the particular needs of their individual regions. RPC operation has been greatly facilitated by the Computer Assisted Pre-Coordination Resource and Database System (CAPRAD) as operated by the National Law Enforcement Corrections Technology Center for the Rocky Mountain Region and the Denver Research Institute. It is in the best interest of the RPCs for the CAPRAD operations to remain under the control of its current responsive and efficient managers.

The DAGS owns and operates the Hawaii State Government telecommunications systems and supporting infrastructure. The DAGS Information and Communication Services Division is the licensee of record for nearly all State of Hawaii government radio systems.

Thank you for the opportunity to comment on this matter.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Russ K. Saito". The signature is fluid and cursive, with the first name "Russ" and last name "Saito" clearly distinguishable.

RUSS K. SAITO
State Comptroller